**IN THE CLAIMS:**

Please enter any changes in the claims indicated in the complete copy of the pending claims, as sought to be amended, presented below:

1. **(Currently Amended)** A kit providing pre measured amounts of components to form a fluorocarbon nutrient emulsion capable of carrying oxygen to living tissue, the kit comprising:

three or more constituent solutions, emulsions or particle compositions, which are the constituent compositions, containing pre measured amounts of components for making the fluorocarbon nutrient emulsion, the constituent compositions comprising:

poly-fluorinated, oxygen carrying compound;

a physiologically acceptable emulsifying agent effective to emulsify the polymer;

a nutrient providing effective amount of carbohydrate;

nutrient providing effective amounts of amino acids ~~or amino acid precursors~~;

an oncotic agent in amount effective to provide, in conjunction with the other components of the ~~solution~~ fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure; and

sufficient salts and buffering agents to provide a physiological osmotic pressure and physiologically appropriate concentrations of potassium and sodium ions;

wherein constituent compositions are selected to allow for sufficient stability of the components to allow for commercial marketing of the kit, and wherein there are no more than eight constituent compositions.

2. **(Canceled).**

3. **(Original)** The kit of claim 1, wherein there are no more than four constituent compositions.

4. **(Original)** The kit of claim 1, wherein at least three of constituent compositions are packaged together in separate chambers of a multi chambered bag having pressure release seams separating the chambers, whereby pressure can be used to break the barriers between chambers to allow the contents to mix, wherein the contents mix to provide the appropriate concentrations.

5. **(Original)** The kit of claim 4, wherein the multi chambered bag, or the multi chambered bag together with a bag that envelops the multi chambered bag has an carbon dioxide permeability of 10 cc/m2•day•atm or less.

6. **(Original)** The kit of claim 4, wherein the multi chambered bag, or the multi chambered bag together with a bag that envelops the multi chambered bag has an carbon dioxide permeability of 1.0 cc/m2•day•atm or less.

7. **(Original)** The kit of claim 4, wherein the multi chambered bag, or the multi chambered bag together with a bag that envelops the multi chambered bag has an carbon dioxide permeability of 0.5 cc/m2•day•atm or less.

8. **(Original)** The kit of claim 1, wherein the constituent compositions are adapted to provide a fluorocarbon nutrient emulsion with the following component amounts:

| | |
|---|---|
| Poly-Fluorinated, Oxygen-Carrying Compound, %v/v | 9.5-10-5 |
| Phospholipid, mg/mL | 11.5 |
| Albumin, g/dL, | 1.67 |
| α-Ketoglutaric Acid, μg/mL | 25 |

| Amino Acids, μg/mL | |
|---|---|
| L-Isoleucine+L-Leucine | 17.5 |
| L-Valine | 16.6 |
| L-Alanine | 28.6 |
| L-Serine | 24.6 |
| L-Histidine | 10.3 |
| L-Methionine | 2.1 |
| L-Phenylalanine+L-Lysine | 35.3 |
| L-Threonine+L-Arginine | 48.3 |
| L-Tyrosine | 7.9 |
| $Na^{+}$, mM | 147 |
| $K^{+}$, mM | 2.9 |
| $Cl^{-}$, mM | 130 |
| $Ca^{+2}$, mM | 1.15 |
| $Mg^{+2}$, mM | 1.12 |
| Glucose (dextrose), mg/dL | 94 |

9. **(Original)** A kit providing pre measured amounts of components to form a fluorocarbon nutrient emulsion capable of carrying oxygen to living tissue, the kit comprising: constituent solutions, emulsions or particle compositions, which are the constituent compositions, containing pre measured amounts of components for making the fluorocarbon nutrient emulsion, the constituent compositions comprising:

a first constituent composition comprising an emulsion of poly-fluorinated, oxygen carrying compound;

a second constituent composition comprising a solution of sodium and potassium salts;

a third constituent composition comprising a solution of a nutrient providing effective amount of glucose;

a fourth constituent composition comprising a solution of an oncotic agent in amount effective to provide, in conjunction with the other components of the fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure;

a fifth constituent composition comprising solution of nutrient providing effective amounts of amino acids; and

a sixth constituent composition comprising a nutrient providing effective amount of α ketoglutaric acid.

10. **(Original)** The kit of claim 9, wherein the second constituent composition comprises one or both of calcium and magnesium salts.

11. **(Original)** The kit of claim 9, wherein the fifth constituent composition comprises nutrient providing effective amounts of arginine, histidine, leucine, lysine, methionine, phenylalanine, threonine and valine, and all of the components are essentially lacking in glutamic acid, glutamine and glycine.

12. **(Original)** A kit providing pre-measured amounts of components to form a fluorocarbon nutrient emulsion capable of carrying oxygen to living tissue, the kit comprising: constituent solutions, emulsions or particle compositions, which are the constituent compositions, containing pre measured amounts of components for making the fluorocarbon nutrient emulsion, the constituent compositions comprising:

a first constituent composition comprising an emulsion of poly-fluorinated, oxygen carrying compound;

a second constituent composition comprising a solution of sodium, potassium, magnesium and calcium salts;

a third constituent composition comprising a solution of oncotic agent in an amount effective to provide, in conjunction with the other components of the fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure; and

a fourth constituent composition comprising solution of a nutrient providing effective amounts of amino acids,

wherein either the second constituent composition comprises a nutrient providing effective amount of glucose or the kit comprises a fifth constituent composition comprising a nutrient providing effective amount of glucose.

13. **(Original)** The kit of claim 12, wherein the first constituent composition comprises a nutrient providing effective amount of α ketoglutaric acid.

14. **(Original)** The kit of claim 12, wherein the fourth constituent composition comprises a nutrient providing effective amount of α ketoglutaric acid.

15. **(Original)** The kit of claim 12, wherein the second constituent composition comprises a nutrient providing effective amount of glucose.

16. **(Original)** The kit of claim 15, wherein one or more of the second and fourth constituent compositions is in dried form adapted to be diluted in a pre-determined amount of water prior to use.

17. **(Original)** The kit of claim 12, wherein the kit comprises the fifth constituent composition.

18. **(Previously Amended)** The kit of claim 17, wherein one or more of the second, fourth and fifth constituent compositions is in dried form adapted to be diluted in a pre-determined amount of water prior to use.

19. **(Original)** The kit of claim 12, wherein at least the first, second and fourth constituent compositions are packaged together in separate chambers of a multi chambered bag having pressure release seams separating the chambers, whereby pressure can be used to break the barriers between chambers to allow the contents to mix, wherein the contents mix to provide the appropriate concentrations.

20. **(Original)** The kit of claim 19, wherein the multichambered bag has an injection port through which the third constituent composition can be injected to complete the fluorocarbon nutrient emulsion.

21. **(Original)** The kit of claim 12, wherein the first, second, third and fourth constituent compositions are packaged together in separate chambers of a multi chambered bag having pressure release seams separating the chambers, whereby pressure can be used to break the barriers between chambers to allow the contents to mix, wherein the contents mix to provide the appropriate concentrations.

22. **(Original)** A fluorocarbon nutrient emulsion with the following component amounts:

| | |
|---|---|
| Poly-Fluorinated, Oxygen-Carrying Compound, %v/v | 9.5-10-5 |
| Albumin, g/dL, | 1.67 |
| α-Ketoglutaric Acid, μg/mL | 25 |

| | |
|---|---|
| Amino Acids, μg/mL | |
| L-Isoleucine+L-Leucine | 17.5 |
| L-Valine | 16.6 |
| L-Alanine | 28.6 |
| L-Serine | 24.6 |
| L-Histidine | 10.3 |
| L-Methionine | 2.1 |
| L-Phenylalanine+L-Lysine | 35.3 |
| L-Threonine+L-Arginine | 48.3 |
| L-Tyrosine | 7.9 |
| $Na^+$, mM | 147 |
| $K^+$, mM | 2.9 |
| $Cl^-$, mM | 130 |
| $Ca^{+2}$, mM | 1.15 |
| $Mg^{+2}$, mM | 1.12 |
| Glucose (dextrose), mg/dL | 94 |

23. (**Currently Amended**) A vehicle kit providing pre measured amounts of components to form a vehicle corresponding to a fluorocarbon nutrient emulsion formed from a corresponding fluorocarbon nutrient emulsion kit, the corresponding fluorocarbon nutrient emulsion kit comprising constituent solutions, emulsions or particle compositions, which are the first constituent compositions, containing pre measured amounts of components for making the fluorocarbon nutrient emulsion, the first constituent compositions made up of:

(a) poly-fluorinated, oxygen carrying compound;

(b) a phospholipid emulsifying agent effective to emulsify the poly-fluorinated, oxygen carrying compound, wherein the poly-fluorinated, oxygen carrying compound and the phospholipid emulsifying agent are supplied in one first constituent composition wherein the poly-fluorinated, oxygen carrying compound is emulsified by the phospholipid emulsifying agent, this emulsified poly-fluorinated, oxygen carrying compound composition

providing a portion of sodium or potassium ions of the fluorocarbon nutrient emulsion;

(c) a nutrient providing effective amount of carbohydrate;

(d) nutrient providing effective amounts of amino acids ~~or amino acid precursors~~;

(e) an oncotic agent in amount effective to provide, in conjunction with the other components of the fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure; and

(f) sufficient salts and buffering agents to provide a physiological osmotic pressure and physiologically appropriate concentrations of potassium and sodium ions;

the vehicle kit essentially free of poly-fluorinated, oxygen carrying compound and comprising the following separate vehicle kit compositions:

all the first constituent compositions but the emulsified poly-fluorinated, oxygen carrying compound composition; and

supplement constituent compositions comprising one or more components effective to supply the sodium or potassium ions that would be provided by the emulsified poly-fluorinated, oxygen carrying compound composition.

24. **(Original)** The vehicle kit of claim 23, wherein the vehicle kit compositions of the corresponding fluorocarbon nutrient emulsion kit comprise:

(1) a first constituent composition comprising an emulsion of poly-fluorinated, oxygen carrying compound;

(2) a first constituent composition comprising a solution of sodium, potassium, magnesium and calcium salts;

(3) a first constituent composition comprising a solution of a nutrient providing effective amount of glucose;

(4) a first constituent composition comprising a solution of an oncotic agent in amount effective to provide, in conjunction with the other components of the fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure;

(5) a first constituent composition comprising a solution of nutrient providing effective amounts of amino acids; and

(6) a first constituent composition comprising a nutrient providing effective amount of α ketoglutaric acid,

whereby the vehicle kit compositions comprise first constituent compositions (2) through (6) and at least one supplement constituent composition.

25. **(Original)** The vehicle kit of claim 23, wherein the vehicle kit compositions of the corresponding fluorocarbon nutrient emulsion kit comprise:

(1) a first constituent composition comprising an emulsion of poly-fluorinated, oxygen carrying compound;

(2) a first constituent composition comprising a solution of sodium, potassium, magnesium and calcium salts;

(3) a first constituent composition comprising a solution of the oncotic agent in amount effective to provide, in conjunction with the other components of the fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure; and

(4) a first constituent composition comprising a solution of a nutrient providing effective amounts of amino acids,

whereby the vehicle kit compositions comprise first constituent compositions (2) through (4) and at least one supplement constituent composition.

26. **(Original)** The vehicle kit of claim 23, wherein the supplement constituent compositions are effective to supply the α ketoglutaric acid that would be provided by the emulsified poly-fluorinated, oxygen carrying compound composition.

27. **(Original)** The vehicle kit of claim 23, wherein the supplement constituent compositions are effective to supply the phospholipid emulsifying agent that would be provided by the emulsified poly-fluorinated, oxygen carrying compound composition.

28. **(Original)** A kit for use in delivering a fluorocarbon nutrient emulsion comprising (a) the vehicle kit of claim 23 and (b) the corresponding fluorocarbon nutrient emulsion kit.

29. **(Original)** The vehicle kit of claim 23, wherein vehicle kit compositions and supplement and one or more supplement compositions adapted to provide a vehicle solution with the following component amounts:

| | |
|---|---|
| Albumin, g/dL, | 1.67 |
| α-Ketoglutaric Acid, μg/mL | 25 |
| Amino Acids, μg/mL | |
| L-Isoleucine+L-Leucine | 17.5 |
| L-Valine | 16.6 |
| L-Alanine | 28.6 |
| L-Serine | 24.6 |
| L-Histidine | 10.3 |
| L-Methionine | 2.1 |
| L-Phenylalanine+L-Lysine | 35.3 |
| L-Threonine+L-Arginine | 48.3 |
| L-Tyrosine | 7.9 |
| $Na^{+}$, mM | 147 |
| $K^{+}$, mM | 2.9 |
| $Cl^{-}$, mM | 130 |
| $Ca^{+2}$, mM | 1.15 |
| $Mg^{+2}$, mM | 1.12 |
| Glucose (dextrose), mg/dL | 94 |

30. **(Original)** The vehicle kit of claim 23, adapted to provide a vehicle solution with the following further component amount:

Phospholipid, mg/mL 11.5.

31. **(Original)** The vehicle kit of claim 23, comprising:

a first vehicle kit composition comprising a solution of (i) sodium, potassium, magnesium and calcium salts, (ii) a nutrient providing effective amount of α-ketoglutaric acid, and (iii) a nutrient providing effective amounts of amino acids;

a second vehicle kit composition comprising a solution of the oncotic agent in amount effective to provide, in conjunction with the other components of the fluorocarbon nutrient emulsion, a physiologically acceptable oncotic pressure; and

a third vehicle kit composition comprising a solution of a nutrient providing effective amount of glucose.

32. **(Currently Amended)** A vehicle solution ~~with~~ consisting essentially of the following component amounts:

| | |
|---|---|
| Albumin, g/dL, | 1.67 |
| α-Ketoglutaric Acid, μg/mL | 25 |

| Amino Acids, μg/mL | |
|---|---|
| L-Isoleucine+L-Leucine | 17.5 |
| L-Valine | 16.6 |
| L-Alanine | 28.6 |
| L-Serine | 24.6 |
| L-Histidine | 10.3 |
| L-Methionine | 2.1 |
| L-Phenylalanine+L-Lysine | 35.3 |
| L-Threonine+L-Arginine | 48.3 |
| L-Tyrosine | 7.9 |
| $Na^{+}$, mM | 147 |
| $K^{+}$, mM | 2.9 |
| $Cl^{-}$, mM | 130 |
| $Ca^{+2}$, mM | 1.15 |
| $Mg^{+2}$, mM | 1.12 |
| Glucose (dextrose), mg/dL | 94 |

33. **(Canceled).**

34. **(Currently Amended)** A fluorocarbon nutrient emulsion capable of carrying oxygen to living tissue or a kit of pre measured components for such a solution, the solution or kit comprising:

a poly-fluorinated, oxygen carrying compound;

a physiologically acceptable emulsifying agent effective to emulsify the poly-fluorinated, oxygen carrying compound; and

nutrient providing effective amounts of amino acids or one or more amino acid precursors selected from citric acid, cis-aconitic acid, isocitric acid, α ketoglutaric acid, succinic acid, fumaric acid, malic acid and oxaloacetic acid, wherein the solution or kit is essentially lacking in glutamic acid, glutamine and glycine.

35. **(Original)** The fluorocarbon nutrient emulsion or kit of claim 34, further comprising a nutrient providing effective amount of carbohydrate.

36. **(Canceled).**

37. **(Currently Amended)** A nutrient solution or a kit of pre measured components for such a solution, the solution or kit comprising:

a nutrient providing effective amount of carbohydrate;

an oncotic agent in amount effective to provide, in conjunction with the other components of the solution, a physiologically acceptable oncotic pressure; and

nutrient providing effective amounts of amino acids ~~or amino acid precursors including~~ comprising arginine, histidine, leucine, isoleucine, lysine, methionine, phenylalanine, threonine and valine, wherein the solution or kit is essentially lacking in glutamic acid, glutamine and glycine.

38. **(Original)** The nutrient emulsion or kit of claim 37, wherein the nutrient providing effective amounts of amino acids or amino acid precursors comprise a nutrient providing effective amount of $\alpha$ ketoglutaric acid or a pharmaceutically acceptable salt thereof.

39. **(Currently Amended)** A fluorocarbon nutrient emulsion capable of carrying a oxygen to living tissue or a kit of pre measured components for such a solution, the solution or kit comprising:

a poly-fluorinated, oxygen carrying compound;

a physiologically acceptable emulsifying agent effective to emulsify the poly-fluorinated, oxygen carrying compound; and

nutrient providing effective amounts of amino acids or amino acid precursors, ~~including~~ comprising at least one citric acid, cis-aconitic acid, isocitric acid, succinic acid, fumaric acid, malic acid or oxaloacetic acid or a pharmaceutically acceptable salt thereof, wherein the solution or kit is essentially lacking in glutamic acid and glutamine.

40. **(Currently Amended)** A nutrient solution or a kit of pre measured components for such a solution, the solution or kit comprising:

a nutrient providing effective amount of carbohydrate;

an oncotic agent in amount effective to provide, in conjunction with the other components of the solution, a physiologically acceptable oncotic pressure; and

nutrient providing effective amounts of amino acids or amino acid precursors ~~including~~ comprising arginine, histidine, leucine, isoleucine, lysine, methionine, phenylalanine, threonine, valine, and at least one of citric acid, cis-aconitic acid, isocitric acid, succinic acid, fumaric acid, malic acid or oxaloacetic acid or a pharmaceutically acceptable salt thereof, wherein the solution or kit is essentially lacking in glutamic acid and glutamine.

41-50. **(Canceled)**.

51. **(New)** The kit of claim 1, wherein there are four or five constituent compositions.

52. **(Canceled)**.